



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,959	09/12/2003	Donald Fedyk	120-142	8403

34845 7590 10/10/2007
McGUINNESS & MANARAS LLP
125 NAGOG PARK
ACTON, MA 01720

EXAMINER

NALVEN, ANDREW L

ART UNIT	PAPER NUMBER
----------	--------------

2134

MAIL DATE	DELIVERY MODE
-----------	---------------

10/10/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/661,959	Applicant(s) FEDYK ET AL.	
	Examiner Andrew L. Nalven	Art Unit 2134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,6,10,12 and 16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,6,10,12 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1, 2, 6, 10, 12, and 16 are pending.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 2, 6, 10, 12, and 16 have been considered and are persuasive with regards to the failure of Hoke and Hama to teach using the group identifier for transforming the packet. The instant office action presents a new rejection in view of Hoke, Hama, and Chandran. Chandran remedies the deficiencies of Hoke and Hama with regards to the cited feature by teaching that a group identifier in the form of MPLS/VPN tags, much like the tags in Hama, is used for both routing and for security (Chandran, column 2 lines 1-8). One of ordinary skill in the art would find it obvious to modify the invention of Hoke to allow the group identifier of Chandran to specify the encryption and security policy of Hoke because it offers the advantage of allowing the application of different security and routing treatment to multiple traffic flows being transmitted over a shared link (Chandran, column 1 lines 55-67, *KSR International Co. v. Teleflex Inc.*).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1, 2, 6, 10, 12, and 16 are rejected** under 35 U.S.C. 103(a) as being unpatentable over Hoke et al US Patent No. 6,701,437 in view of Hama US Patent No. 7,072,346.

4. **With regards to claim 1**, Hoke teaches receiving at the ingress point of the backbone (Hoke, column 16 lines 23-31, VPN unit receives) group security association data associated with the group of stations (Hoke, column 16 lines 23-31, Figures 7 and 8), receiving a packet at the ingress point of the backbone (Hoke, column 7 lines 46-53, VPN unit receives packet), a packet including an identifier corresponding to the group of stations and a destination address for the packet (Hoke, column 7 lines 46-53, addressed to the VPN, encapsulation includes destination address), transforming, at the ingress point of the backbone, the packet according to the group security association associated with the identifier (Hoke, column 7 lines 46-53, column 9 lines 18-34 and column 9 lines 60-67) and forwarding the transformed packet over the backbone using the group identifier as a backbone address (Hoke, column 7 lines 46-58, strips off). Hoke fails to teach the packet including a group identifier and a destination for the packet and the ingress point being a provider edge device. However, Hama teaches

Art Unit: 2134

receiving a packet including a group identifier and a destination for the packet and forwarding the transformed packet using the group identifier (Hama, column 10 lines 25-53, destination address contained in the packet, when packet enters...VID contained in tag) wherein the ingress point is a provider edge device (Hama, Abstract, edge routers provided between the MPLS network and VLANs for interfacing between two).

Chandran teaches transforming the group identifier using the group identifier (Chandran, column 2 lines 1-7, MPLS-VPN tag used for security policies on the traffic).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize Hama and Chandran's method of using group identifiers because it offers the advantage of allow terminals belong to the same VLAN to communicate with each other regardless of where they are installed (Hama, column 2 lines 4-20) and because it offers the advantage of allowing the application of different security and routing treatment to multiple traffic flows being transmitted over a shared link (Chandran, column 1 lines 55-67).

5. **With regards to claim 2**, Hoke as modified teaches retaining fields of the packet needed to transfer the packet to the destination address over the backbone (Hoke, column 7 lines 47-57, encapsulates).

6. **With regards to claims 6, 10, and 12**, Hoke teaches receiving, at the egress point of the backbone, group security association data for the group (Hoke, column 16 lines 23-31, VPN unit receives), receiving a packet at the egress point of the backbone, restoring the packet responsive to the group security association data associated with the group (Hoke, column 7 lines 47-57, strip off), and forwarding the packet to the

Art Unit: 2134

destination (Hoke, column 7 lines 55-57). Hoke fails to teach the packet including a group identifier and a destination for the packet and the egress point being a provider edge device. However, Hama teaches receiving a packet including a group identifier and a destination for the packet (Hama, column 10 lines 25-53, destination address contained in the packet, when packet enters...VID contained in tag) wherein the egress point is a provider edge device (Hama, Abstract, edge routers provided between the MPLS network and VLANs for interfacing between two). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize Hama's method of using group identifiers because it offers the advantage of allow terminals belong to the same VLAN to communicate with each other regardless of where they are installed (Hama, column 2 lines 4-20).

7. **With regards to claim 13**, Hoke as modified teaches the group comprising at least three stations (Hoke, Figure 1).

8. **With regards to claim 16**, Hoke as modified teaches the means for securing data includes transform logic for encrypting only a portion of data transferred between the ingress point and the egress point of the communication link (Hoke, column 9 lines 61-67, encapsulated portion of data is encrypted, but not VPN headers).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew L. Nalven whose telephone number is 571 272

Art Unit: 2134

3839. The examiner can normally be reached on Monday - Thursday 8-6, Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on 571 272 3811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Andrew Nalven

